

Date: December 1, 2006

I hereby certify that, on the date indicated above, I deposited this paper with identified attachments and/or fee with the U.S. Postal Service and that it was addressed for delivery to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 by "First Class Mail" service.



Kim Blum

Signature

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of:	OHARA et al.	)	Examiner:	Unassigned
		)		
Application No.:	10/594,707	)	Group Art Unit:	Unassigned
		)		
Filed:	September 28, 2006	)	Confirmation No.:	Unassigned
		)		
Docket No.:	3190-100	)	Customer No.:	33432

For: GENE ENCODING A GUANINE NUCLEOTIDE EXCHANGE FACTOR  
AND THE GENE PRODUCT THEREOF

**INFORMATION DISCLOSURE STATEMENT**  
**PURSUANT TO 37 CFR 1.97(b)**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 1, 2006

Sir:

The attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached Form PTO/SB/08. Pursuant to the current United States Patent and Trademark Office rules, no copies of U.S. Patents/Patent Application Publications are provided.

This Information Disclosure Statement is being submitted before expiration of the three-month period following filing of the above-captioned application.

The above information is presented so that the Patent and Trademark Office can, in the first instance, determine any materiality thereof to the claimed invention. *See* 37 CFR 1.104(a) and 1.106(b) concerning the PTO duty to consider and use any such information. It is respectfully requested that the information be expressly considered during the prosecution of this application,

TJW

4

Information Disclosure Statement  
U.S. Patent Application No. 10/594,707

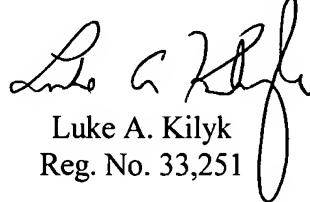
and that the documents cited in the attached Form PTO/SB/08 be made of record therein and appear on the first page of any patent to issue therefrom.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in this application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

It is believed that no fee is required to make this a complete and timely filing. However, if it is determined that a petition or fee is required, the Commissioner is hereby authorized to charge any fee associated with this statement to our Deposit Account No. 50-0925.

Respectfully submitted,



Luke A. Kilyk  
Reg. No. 33,251

Atty. Docket No.: 3190-100  
KILYK & BOWERSOX, P.L.L.C.  
400 Holiday Court, Suite 102  
Warrenton, VA 20186  
Tel.: (540) 428-1701  
Fax: (540) 428-1720  
Enclosures: PTO/SB/08 w/11 Documents



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet 1 of 2 Attorney Docket Number

3190-100

<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(Use as many sheets as necessary)</i></p>		<p><b>Complete if Known</b></p>	
		Application Number	10/594,707
		Filing Date	September 28, 2006
		First Named Inventor	OHARA et al.
		Art Unit	Unassigned
		Examiner Name	Unassigned
Sheet	1	of	2
		Attorney Docket Number	
		3190-100	

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

Examiner  
Signature \_\_\_\_\_ Date  
Considered \_\_\_\_\_

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

2

of

2

Complete if Known	
Application Number	10/594,707
Filing Date	September 28, 2006
First Named Inventor	OHARA et al.
Art Unit	Unassigned
Examiner Name	Unassigned

3190-100

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		International Preliminary Report on Patentability and Written Opinion for PCT/JP/2005/005918 dated October 26, 2006	
		HART et al., Cellular Transformation and Guanine Nucleotide Exchange Activity Are Catalyzed by a Common Domain on the dbl Oncogene Product," THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 269, No. 1, January 7, 1994, pp. 62-65.	
		BI et al., "Autoinhibition Mechanism of Proto-Dbl," MOLECULAR AND CELLULAR BIOLOGY, Vol. 21, No. 5, March 2001, pp. 1463-1474.	
		KATZAV et al., "VAV, a novel human oncogene derived from a locus ubiquitously expressed in hematopoietic cells," THE EMBO JOURNAL, Vol. 8, No. 8, 1989, pp. 2283-2290	
		COSTELLO et al., "The Rho-family GTP exchange factor Vav is a critical transducer of T cell receptor signals to the calcium, ERK, and NF- $\kappa$ B pathways," PROC. NATL. ACAD. SCI. USA, Vol. 96, March 1999, pp. 3035-3040.	
		HORII et al., "A novel oncogene, ost, encodes a guanine nucleotide exchange factor that potentially links Rho and Rac signaling pathways," THE EMBO JOURNAL, Vol. 13, No. 20, 1994, pp. 4776-4786	
		TOKSOZ et al., "Novel human oncogene LBC detected by transfection with distinct homology regions to signal transduction products," ONCOGENE, No. 9, 1994, pp. 621-628.	
		O'BRIEN et al., "Skeletal muscle deformity and neuronal disorder in Trio exchange factor-deficient mouse embryos," PNAS, Vol. 97, No. 22, October 24, 2000, pp. 12074-12078.	
		PENZES et al., "Distinct Roles for the Two Rho GDP/GTP Exchange Factor Domains of Kalirin in Regulation of Neurite Growth and Neuronal Morphology," THE JOURNAL OF NEUROSCIENCE, Vol. 21(21), November 1, 2001, pp. 8426-8434.	
		OHARA et al., "Construction and Characterization of Human Brain cDNA Libraries Suitable for Analysis of cDNA Clones Encoding Relatively Large Proteins," DNA RESEARCH, 4, 1997, pp. 53-59.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.